

**EXPLODED VIEW PARTS DRAWINGS
JP-8 FULL ELECTRIC TYPEWRITER**

PARTS CATALOG

MODEL 3500

MODEL 3512

MODEL 4500

MODEL 4512

TYPE BAR & SECTOR PLATE

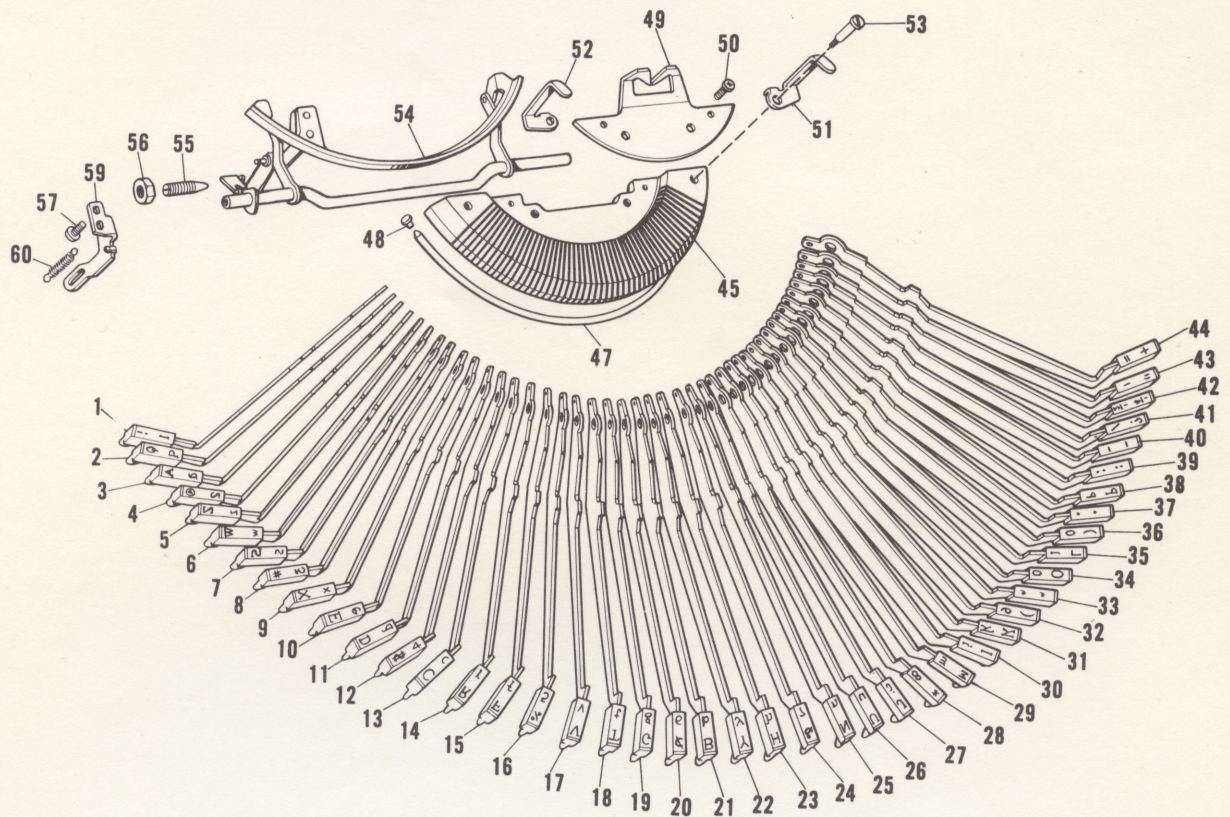


FIG. LA

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LA- 1		Type Bar Unit (left 22)	1		LA-30		Type Bar Unit (right 8)	1	
LA- 2		Type Bar Unit (left 21)	1		LA-31		Type Bar Unit (right 9)	1	
LA- 3		Type Bar Unit (left 20)	1		LA-32		Type Bar Unit (right 10)	1	
LA- 4		Type Bar Unit (left 19)	1		LA-33		Type Bar Unit (right 11)	1	
LA- 5		Type Bar Unit (left 18)	1		LA-34		Type Bar Unit (right 12)	1	
LA- 6		Type Bar Unit (left 17)	1		LA-35		Type Bar Unit (right 13)	1	
LA- 7		Type Bar Unit (left 16)	1		LA-36		Type Bar Unit (right 14)	1	
LA- 8		Type Bar Unit (left 15)	1		LA-37		Type Bar Unit (right 15)	1	
LA- 9		Type Bar Unit (left 14)	1		LA-38		Type Bar Unit (right 16)	1	
LA-10		Type Bar Unit (left 13)	1		LA-39		Type Bar Unit (right 17)	1	
LA-11		Type Bar Unit (left 12)	1		LA-40		Type Bar Unit (right 18)	1	
LA-12		Type Bar Unit (left 11)	1		LA-41		Type Bar Unit (right 19)	1	
LA-13		Type Bar Unit (left 10)	1		LA-42		Type Bar Unit (right 20)	1	
LA-14		Type Bar Unit (left 9)	1		LA-43		Type Bar Unit (right 21)	1	
LA-15		Type Bar Unit (left 8)	1		LA-44		Type Bar Unit (right 22)	1	
LA-16		Type Bar Unit (left 7)	1		LA-45	509397000	Sector Plate	1	
LA-17		Type Bar Unit (left 6)	1		LA-47	521765000	Type Bar Pivot Wire	1	
LA-18		Type Bar Unit (left 5)	1		LA-48	521766000	Cap for Pivot Wire	1	
LA-19		Type Bar Unit (left 4)	1		LA-49	509396003	Type Bar Guide	2	
LA-20		Type Bar Unit (left 3)	1		LA-50	522603001	Screw for Type Bar Guide	2	
LA-21		Type Bar Unit (left 2)	1		LA-51	516187001	Top Cover Prop: right	1	
LA-22		Type Bar Unit (left 1)	1		LA-52	516188001	Top Cover Prop: left	1	
LA-23		Type Bar Unit (right 1)	1		LA-53	521460001	Screw for Sector Plate	3	
LA-24		Type Bar Unit (right 2)	1		LA-54	516120001	Escapement Drive Plate Unit	1	
LA-25		Type Bar Unit (right 3)	1		LA-55	500278001	Center Screw for Escapement Drive Plate	2	
LA-26		Type Bar Unit (right 4)	1		LA-56	106129001	Nut for Center Screw	2	
LA-27		Type Bar Unit (right 5)	1		LA-57	402281002	Screw for Guide Plate	2	
LA-28		Type Bar Unit (right 6)	1		LA-59	516962001	Guide Plate for Escapement Drive Plate	1	
LA-29		Type Bar Unit (right 7)	1		LA-60	500680001	Spring for Escapement Drive Plate	1	

TYPE BAR WIRE, BELL CRANK & KEY

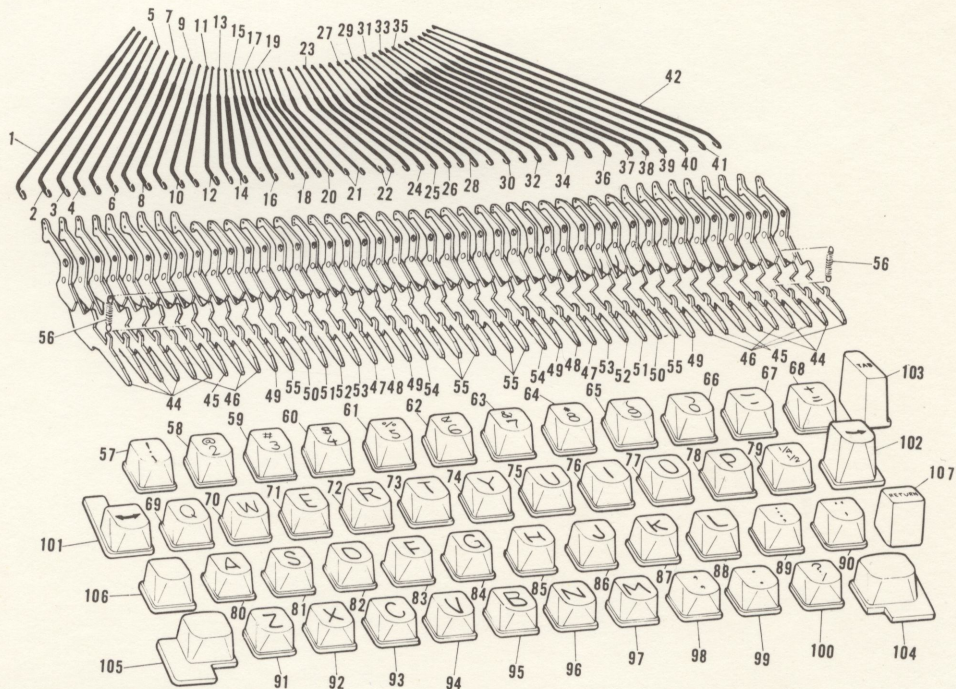


FIG. LB

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LB- 1	516705001	Type Bar Wire (left 22)	1		LB- 56	516983001	Spring for Bell Crank Unit	44	
LB- 2	516704001	Type Bar Wire (left 21)	1		LB- 57		Key (1, !)	1	
LB- 3	500174002	Type Bar Wire (left 20)	1		LB- 58		Key (2, @)	1	
LB- 4	500173002	Type Bar Wire (left 19)	1		LB- 59		Key (3, #)	1	
LB- 5	500172002	Type Bar Wire (left 18)	1		LB- 60		Key (4, \$)	1	
LB- 6	500171002	Type Bar Wire (left 17)	1		LB- 61		Key (5, %)	1	
LB- 7	500170002	Type Bar Wire (left 16)	1		LB- 62		Key (6, &)	1	
LB- 8	500169002	Type Bar Wire (left 15)	1		LB- 63		Key (7, &)	1	
LB- 9	500168002	Type Bar Wire (left 14)	1		LB- 64		Key (8, *)	1	
LB-10	500167002	Type Bar Wire (left 13)	1		LB- 65		Key (9, (	1	
LB-11	500166002	Type Bar Wire (left 12)	1		LB- 66		Key (0,)	1	
LB-12	500165002	Type Bar Wire (left 11)	1		LB- 67		Key (-, _)	1	
LB-13	500164002	Type Bar Wire (left 10)	1		LB- 68		Key (=, +)	1	
LB-14	500163002	Type Bar Wire (left 9)	1		LB- 69		Key (Q)	1	
LB-15	500162002	Type Bar Wire (left 8)	1		LB- 70		Key (W)	1	
LB-16	500161002	Type Bar Wire (left 7)	1		LB- 71		Key (E)	1	
LB-17	500160002	Type Bar Wire (left 6)	1		LB- 72		Key (R)	1	
LB-18	500159002	Type Bar Wire (left 5)	1		LB- 73		Key (T)	1	
LB-19	500158002	Type Bar Wire (left 4)	1		LB- 74		Key (Y)	1	
LB-20	500157002	Type Bar Wire (left 3)	1		LB- 75		Key (U)	1	
LB-21	500156002	Type Bar Wire (left 1, 2)	2		LB- 76		Key (I)	1	
LB-22	500134002	Type Bar Wire (right 1, 2)	2		LB- 77		Key (O)	1	
LB-23	500135002	Type Bar Wire (right 3)	1		LB- 78		Key (P)	1	
LB-24	500136002	Type Bar Wire (right 4)	1		LB- 79		Key (Key (1/2, 3/4))	1	
LB-25	500137002	Type Bar Wire (right 5)	1		LB- 80		Key (A)	1	
LB-26	500138002	Type Bar Wire (right 6)	1		LB- 81		Key (S)	1	
LB-27	500139002	Type Bar Wire (right 7)	1		LB- 82		Key (D)	1	
LB-28	500140002	Type Bar Wire (right 8)	1		LB- 83		Key (F)	1	
LB-29	500141002	Type Bar Wire (right 9)	1		LB- 84		Key (G)	1	
LB-30	500142002	Type Bar Wire (right 10)	1		LB- 85		Key (H)	1	
LB-31	500143002	Type Bar Wire (right 11)	1		LB- 86		Key (J)	1	
LB-32	500144002	Type Bar Wire (right 12)	1		LB- 87		Key (K)	1	
LB-33	500145002	Type Bar Wire (right 13)	1		LB- 88		Key (L)	1	
LB-34	500146002	Type Bar Wire (right 14)	1		LB- 89		Key (;, :)	1	
LB-35	500147002	Type Bar Wire (right 15)	1		LB- 90		Key (Key (", '))	1	
LB-36	500148002	Type Bar Wire (right 16)	1		LB- 91		Key (Z)	1	
LB-37	500149002	Type Bar Wire (right 17)	1		LB- 92		Key (X)	1	
LB-38	500150002	Type Bar Wire (right 18)	1		LB- 93		Key (C)	1	
LB-39	500151002	Type Bar Wire (right 19)	1		LB- 94		Key (V)	1	
LB-40	500152002	Type Bar Wire (right 20)	1		LB- 95		Key (B)	1	
LB-41	516702001	Type Bar Wire (right 21)	1		LB- 96		Key (N)	1	
LB-42	516703001	Type Bar Wire (right 22)	1		LB- 97		Key (M)	1	
LB-44	516882001	Bell Crank Unit (left 17,19,20,21,22, right 18,20,22)	8		LB- 98		Key (Key (.,.))	1	
LB-45	516880001	Bell Crank Unit (left 16, right 16,17,21)	4		LB- 99		Key (Key (.,.))	1	
LB-46	516878001	Bell Crank Unit (left 14,15,18, right 14,15,19)	6		LB-100		Key (/ , ?)	1	
LB-47	516868001	Bell Crank Unit (left 7 right 7)	2		LB-101	516087006	Margin Release Key	1	
LB-48	516866001	Bell Crank Unit (left 6 right 6)	2		LB-102	516336006	Back Space Key	1	
LB-49	516864001	Bell Crank Unit (left 5, 13, right 5, 13)	4		LB-103	516341004	Tabulator Key	1	
LB-50	516876001	Bell Crank Unit (left 11 right 11)	2		LB-104	516618006	Shift Key (right)	1	
LB-51	516874001	Bell Crank Unit (left 10 right 10)	2		LB-105	516738006	Shift Key (left) (M4500, M4512)	1	
LB-52	516872001	Bell Crank Unit (left 9 right 9)	2			516079006	Shift Key (left) (M3500, M3512)	1	
LB-53	516870001	Bell Crank Unit (left 8 right 8)	2		LB-106	516083006	Shift Lock Key	1	
LB-54	516862001	Bell Crank Unit (left 4 right 4)	2		LB-107	516343004	Carriage Return Key	1	
LB-55	516859001	Bell Crank Unit (left 1,2,3,12, right 1,2,3,12)	8						

KEY LEVER, SUB FRAME, MARGIN RELEASE, BACK SPACE, TABULATOR & TOUCH CONTROL

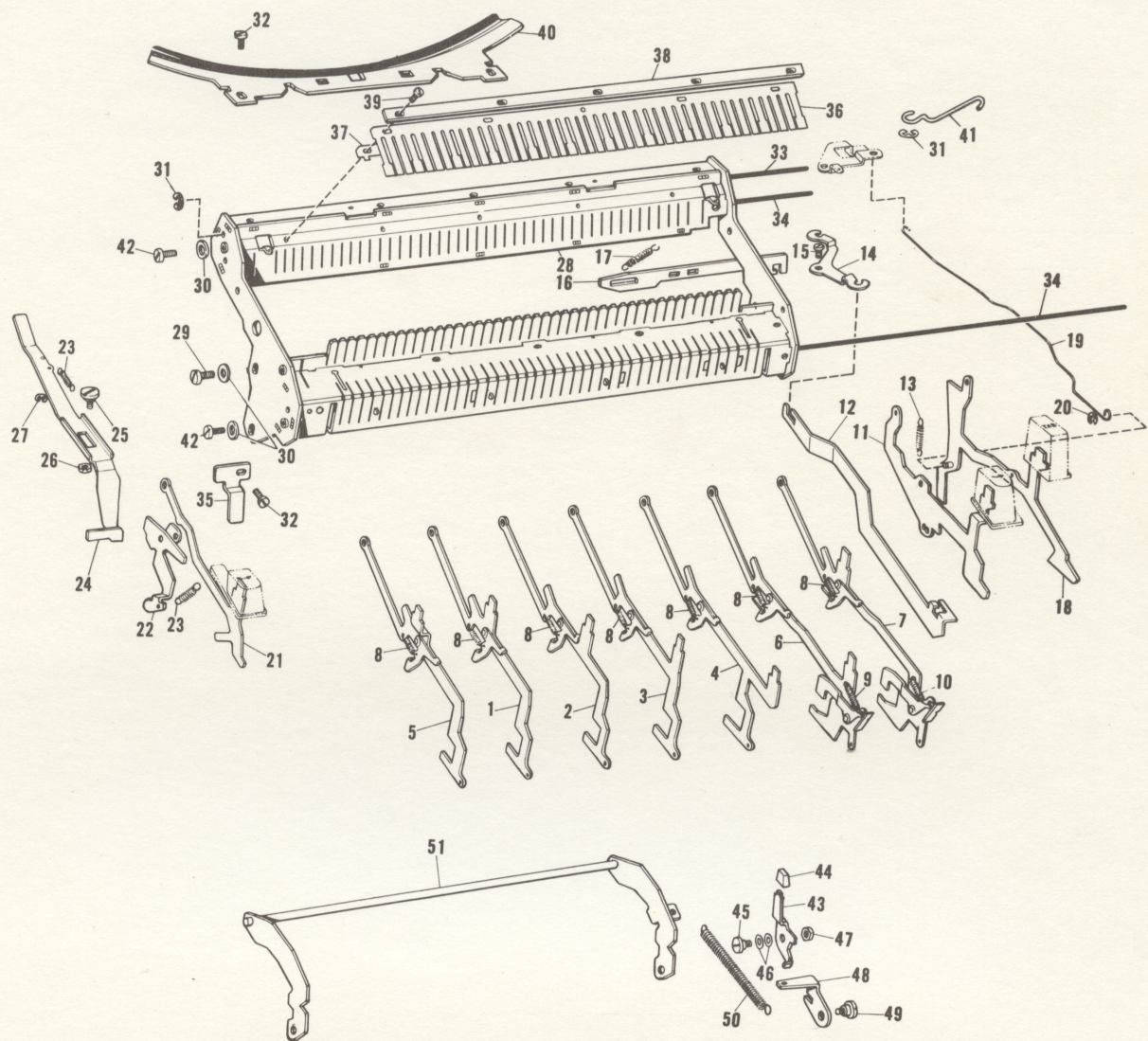


FIG. LC

KEY NO.	PART NO.	DESCRIPTION	QTY	MEMO	KEY NO.	PART NO.	DESCRIPTION	QTY	MEMO
LC- 1	516028001	Key Lever Unit (right 2, 6, 10, 14, 22)	10		LC-25	507481001	Stud Screw for Margin Release Bar	1	
		(left 3, 7, 11, 15, 19)			LC-26	500296001	Nut for Margin Release Bar	1	
LC- 2	516033001	Key Lever Unit (right 4, 8, 12, 16, 20)	11		LC-27	048020346	Snap Ring	1	
		(left 1, 5, 9, 13, 17, 21)			LC-28	516887001	Sub Chassis Unit	1	
LC- 3	516035001	Key Lever Unit (right 1, 5, 9, 13, 17, 21)	11		LC-29	001679413	Screw for Sub Chassis Unit	1	
		(left 4, 8, 12, 16, 20)			LC-30	510909001	Washer for Sub Chassis Unit	6	
LC- 4	516037001	Key Lever Unit (right 3, 7, 11, 19)	8		LC-31	500379001	Snap Ring	3	
		(left 2, 6, 10, 18)			LC-32	401881003	Screw	4	
LC- 5	516031001	Key Lever Unit (left 22)	1		LC-33	510669001	Key Lever Pivot Wire	1	
LC- 6	516043001	Repeat Key Lever (left 14, right 15)	2		LC-34	500251001	Bell Crank Pivot Wire & Key Lever Stop Wire	2	
LC- 7	516039001	Repeat Key Lever (right 18)	1		LC-35	516739001	Shift Lock Plate	1	
LC- 8	516272001	Spring for Key Lever Unit			LC-36	516063001	Key Lever Return Spring	1	
LC- 9	516886001	Spring for Repeat Key Lever for Lowest Row Keys			LC-37	516501000	Key Lever Return Spring Holder	1	
LC-10	516885001	Spring for Repeat Key Lever for Top Row Keys			LC-38	516065001	Fastening Plate for Key Lever Return Spring	1	
LC-11	516741000	Back Space Key Lever	1		LC-39	500654001	Screw for Key Lever Return Spring	1	
LC-12	516742000	Back Space Connector	1		LC-40	521791001	Type Bar Rest with Rubber	1	
LC-13	511091001	Spring for Back Space Key Lever	1		LC-41	507577001	Tab Operating Wire (rear)	1	
LC-14	516744001	Back Space Link	1		LC-42	105123002	Screw for Sub Chassis Unit	5	
LC-15	500460001	Stud Screw for Back Space Link	1		LC-43	516506001	Touch Control Lever	1	
LC-16	516743001	Back Space Bar	1		LC-44	503643006	Tip for Touch Control Lever	1	
LC-17	500404001	Spring for Back Space Bar	1		LC-45	500323001	Stud Screw for Touch Control Lever	1	
LC-18	516339001	Tabulator Key Lever	1		LC-46	500341001	Washer for Touch Control Lever	1	
LC-19	516119001	Tabulator Operating Wire (front)	1		LC-47	500296001	Nut for Touch Control Lever	2	
LC-20	048025346	Snap Ring for Tabulator Operating Wire	1		LC-48	516507001	Touch Control Crank	1	
LC-21	516088001	Margin Release Key Lever	1		LC-49	500368001	Stud Screw for Touch Control Crank	1	
LC-22	516327001	Margin Release Operating Lever	1		LC-50	516509001	Touch Control Spring	1	
LC-23	500677001	Spring for Margin Release Operating Lever	1		LC-51	516899001	Touch Control Operating Lever	1	
LC-24	517053001	Margin Release Bar	1						

SPACE BAR, PAPER METER & COLOR CHANGE

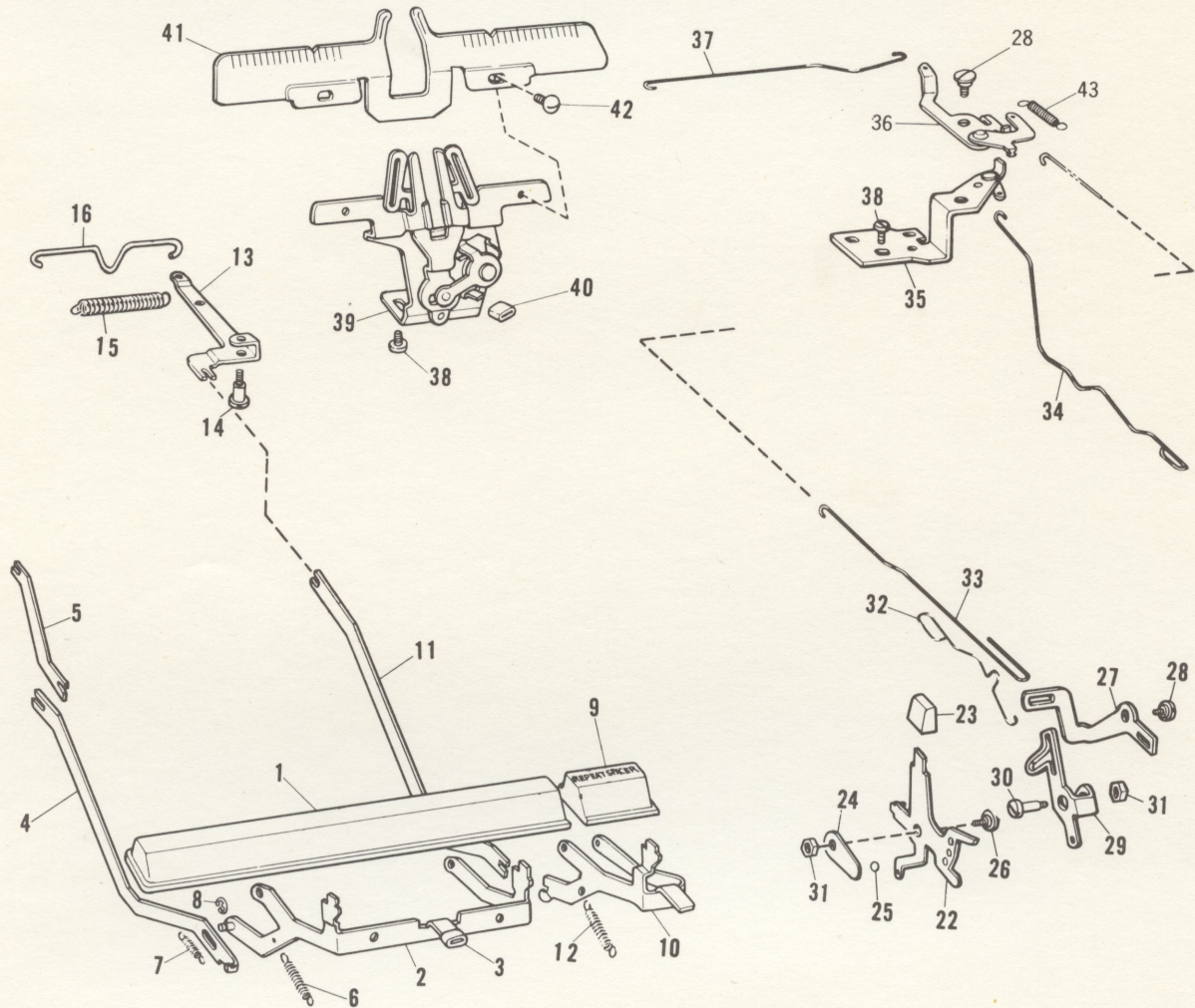


FIG. LD

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LD- 1	512974006	Space Bar	1		LD-25	071030050	Steel Ball	1	
LD- 2	516656001	Space Bar Lever Unit	1		LD-26	505951001	Stud Screw for Ribbon Color Selector	1	
LD- 3	500315001	Cushon Rubber for Space Bar Lever Unit	1		LD-27	521819001	Color Change Lever	1	
LD- 4	516659000	Space Bar Connector (front)	1		LD-28	500283001	Stud Screw for Color Change Lever	2	
LD- 5	516660000	Space Bar Connector (rear)	1		LD-29	521955001	Ribbon Vibrator Operating Lever	1	
LD- 6	516697001	Spring for Space Bar Lever Unit	1		LD-30	500422001	Stud Screw for Ribbon Vibrator Operating Lever	1	
LD- 7	516698001	Spring for Space Bar Connector	1		LD-31	500296001	Nut	3	
LD- 8	048020346	Snap Ring for Space Bar Connector	1		LD-32	516953001	Drive Wire for Ribbon Vibrator Operating Lever	1	
LD- 9	512975	Repeat Space Key	1		LD-33	521821001	Ribbon Vibrator Wire (front)	1	
LD-10	516661000	Repeat Space Lever	1		LD-34	516115001	Color Change Stop Wire	1	
LD-11	516662000	Repeat Space Bar Connector	1		LD-35	507749001	Holder for Ribbon Operating Link	1	
LD-12	516697001	Spring for Repeat Space Lever	1		LD-36	500332001	Ribbon Operating Link	1	
LD-13	516663001	Repeat Space Crank (front)	1		LD-37	500982001	Ribbon Vibrator Wire (rear)	1	
LD-14	516982001	Stud Screw for Repeat Space Crank	1		LD-38	402281002	Screw for Paper Meter Complete	4	
LD-15	512189001	Spring for Repeat Space Crank	1		LD-39	521826001	Paper Meter Complete	1	
LD-16	509971001	Repeat Space Crank Wire	1		LD-40	507494001	Cushion Rubber	1	
LD-22	516898001	Ribbon Color Selector	1		LD-41	521829001	Paper Meter	1	
LD-23	503643006	Tip for Ribbon Color Selector	1		LD-42	505165001	Screw for Paper Meter	2	
LD-24	500322001	Spring Plate for Ribbon Color Selector	1						

RIBBON

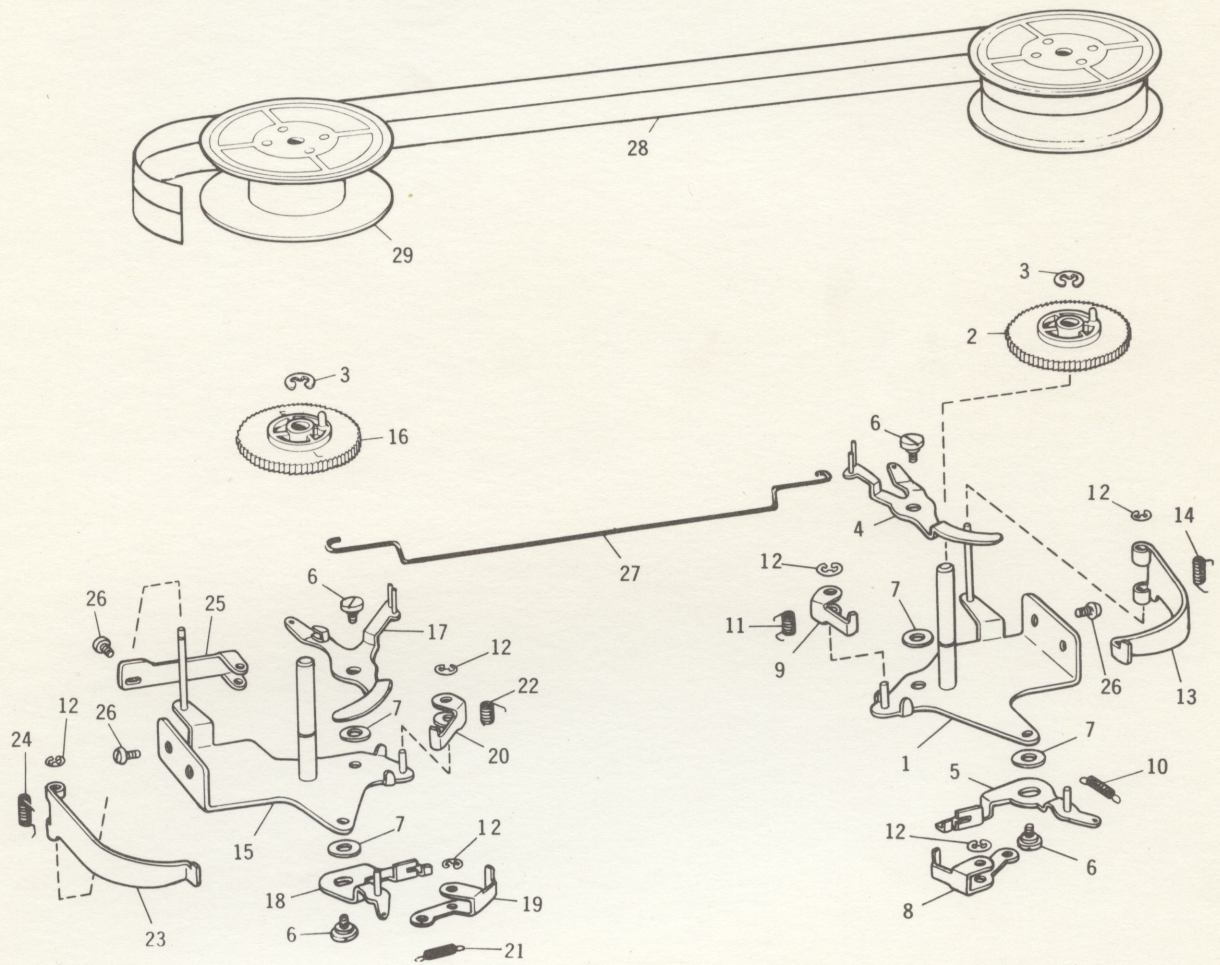


FIG. LE

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LE- 1	509590001	Ribbon Spool Holder (right)	1		LE-16	504598001	Ribbon Feed Wheel (left)	1	
LE- 2	504597001	Ribbon Feed Wheel (right)	1		LE-17	505484001	Ribbon Reverse Lever (left) Unit	1	
LE- 3	500357001	Snap Ring for Ribbon Feed Wheel	2		LE-18	517139001	Ribbon Feed Crank (left)	1	
LE- 4	500984001	Ribbon Reverse Lever (right) Unit	1		LE-19	517131001	Ribbon Feed Pawl (left)	1	
LE- 5	517138001	Ribbon Feed Crank (right)	1		LE-20	500374001	Ribbon Stop Pawl (left)	1	
LE- 6	500283001	Stud Screw	4		LE-21	510052001	Spring for Ribbon Feed Pawl	1	
LE- 7	500986001	Washer	4		LE-22	500711001	Spring for Ribbon Stop Pawl	1	
LE- 8	517129001	Ribbon Feed Pawl (right)	1		LE-23	505473001	Ribbon Holding Arm (left)	1	
LE- 9	500373001	Ribbon Stop Pawl (right)	1		LE-24	510726001	Spring for Ribbon Holding Arm	1	
LE-10	510052001	Spring for Ribbon Feed Pawl	1		LE-25	505457001	Reverse Snap Spring	1	
LE-11	500710001	Spring for Ribbon Stop Pawl	1		LE-26	402281002	Screw for Ribbon Spool Holder	5	
LE-12	500379001	Snap Ring	6		LE-27	517065001	Ribbon Reverse Wire	1	
LE-13	505472001	Ribbon Holding Arm (right)	1		LE-28	504594001	Ribbon with Spool	1	
LE-14	510725001	Spring for Ribbon Holding Arm	1		LE-29	500725001	Ribbon Spool	1	
LE-15	509591001	Ribbon Spool Holder (left)	1						

CARRIAGE RAIL, PINION BASE, SPRING DRUM & WARNING BELL

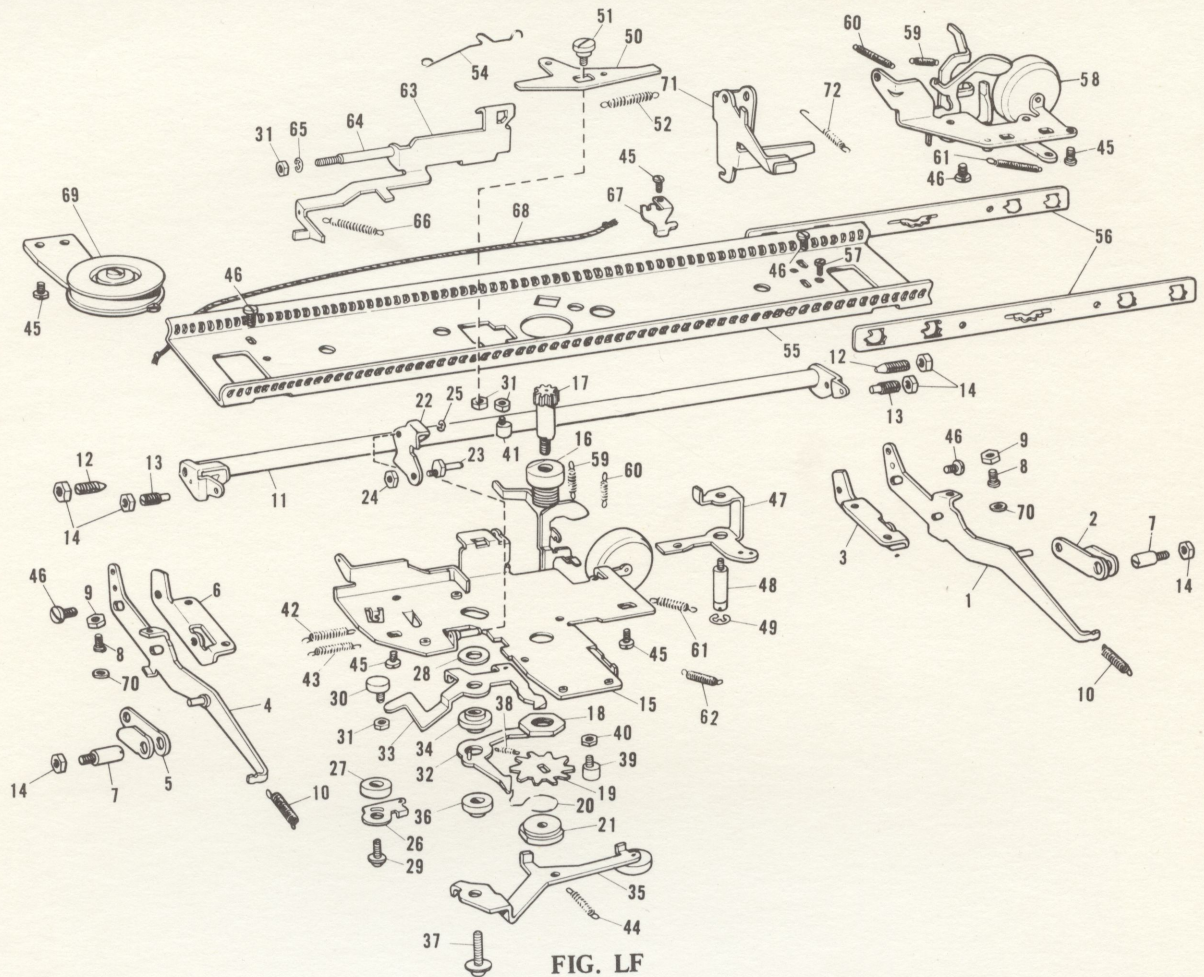


FIG. LF

KEY NO.	PART NO.	DESCRIPTION	QTY	MEMO	KEY NO.	PART NO.	DESCRIPTION	QTY	MEMO
LF- 1	516908001	Carriage Frame (right)	1		LF-40	516109001	Nut for Eccentric Screw (M4500, M4512)	1	
LF- 2	500815001	Carriage Link (right)	1			500296001	Nut for Eccentric Screw (M3500, M3512)		
LF- 3	500400001	Carriage Holder (right)	1		LF-41	516829001	Eccentric Screw for Half Space Ratchet (M4500, M4512)	1	
LF- 4	516910001	Carriage Frame (left)	1			501023001	Eccentric Screw for Half Space Ratchet (M3500, M3512)		
LF- 5	500816001	Carriage Link (left)	1		LF-42	501406001	Spring for Half Space Ratchet	1	
LF- 6	500401001	Carriage Holder (left)	1		LF-43	510805001	Spring for Repeat Space Operating Lever (M4500, M4512)	1	
LF- 7	500784001	Stud Screw for Carriage Link	2			503158001	Spring for Repeat Space Operating Lever (M3500, M3512)		
LF- 8	516574001	Shift Adjusting Screw	2		LF-44	520202001	Spring for Repeat Space Operating Lever	1	
LF- 9	516399001	Nut for Shift Adjusting Screw	2		LF-45	402281002	Screw for Pinion Base	6	
LF-10	507165001	Shift Balance Spring	2		LF-46	001660413	Screw	2	
LF-11	516959001	Shift Link (rear) Unit	1		LF-47	516745000	Repeat Space Crank (rear)	1	
LF-12	500278001	Center Screw for Shift Link	2		LF-48	521813001	Stud for Repeat Space Crank	1	
LF-13	500498001	Stud for Carriage Frame	2		LF-49	048025346	Snap Ring for Repeat Space Crank	1	
LF-14	106129001	Nut	6		LF-50	517073001	Escape Stopper Unit	1	
LF-15	516774001	Pinion Base Unit (M4500, M4512)	1		LF-51	505951001	Stud Screw for Escape Stopper Unit	1	
	517033001	Pinion Base Unit (M3500, M3512)			LF-52	512048001	Spring for Escape Stopper Unit	1	
LF-16	501010000	Pinion Boss	1		LF-54	517059001	Escape Stop Wire	1	
LF-17	501012001	Space Pinion	1		LF-55	517061001	Carriage Rail (M3512, M4512)	1	
LF-18	501011001	Nut for Pinion Boss	1			517056001	Carriage Rail (M3500, M4500)		
LF-19	500430001	Space Ratchet Wheel	1		LF-56	516519001	Carriage Retainer Unit (M3512, M4512)	2	
LF-20	500431001	Ratchet Release Spring	1			500634001	Carriage Retainer Unit (M3500, M4500)		
LF-21	500432001	Nut for Space Pinion	1		LF-57	507658001	Tapping Screw for Carriage Rail	2	
LF-22	516164001	Escape Crank (front)	1		LF-58	521927001	Warning Bell Complete (M3500, M3512)	1	
LF-23	516241001	Eccentric Stud for Escape Crank	1		LF-59	507065001	Spring for Bell Hammer (M4500, M4512)	1	
LF-24	500683001	Nut for Escape Crank	1			500413001	Spring for Bell Hammer (M3500, M3512)		
LF-25	048015346	Snap Ring for Escape Crank	1		LF-60	500413001	Spring for Bell Hammer Operating Lever	1	
LF-26	5Q1016001	Escape Crank (rear)	1		LF-61	516964001	Spring for Tabulator Operating Lever (M4500, M4512)		
LF-27	501017001	Stud Collar for Escape Crank	1			510688001	Spring for Tabulator Operating Lever (M3500, M3512)		
LF-28	501018001	Washer for Half Space Ratchet	1		LF-62	505987001	Spring (D) for Tabulator Operating Lever (M3500, M3512)	1	
LF-29	522199001	Screw with Washer for Escape Crank	1		LF-63	516825001	Carriage Stopper (M4500, M4512)	1	
LF-30	501019001	Eccentric Screw for Escape Crank	1			516941001	Carriage Stopper (M3500, M3512)		
LF-31	500296001	Nut	4		LF-64	522106001	Shaft for Carriage Stopper	1	
LF-32	516405001	Space Ratchet	1		LF-65	048020346	Snap Ring for Carriage Stopper	1	
LF-33	516783001	Half Space Ratchet (M4500, M4512)	1		LF-66	500404001	Spring for Carriage Stopper	1	
	509980001	Half Space Ratchet (M3500, M3512)			LF-67	500643001	Hook for Carriage Draw String	1	
LF-34	501022001	Stud Collar for Space Ratchet	1		LF-68	500470001	Carriage Draw String (M3500, M4500)	1	
LF-35	516784001	Repeat Space Operating Lever (M4500, M4512)	1			501 27001	Carriage Draw String (M3512, M4512)		
	509975001	Repeat Space Operating Lever (M3500, M3512)			LF-69	516412001	Spring Drum Complete	1	
LF-36	509974001	Stud Collar for Repeat Space Operating Lever	1		LF-70	516575001	Rubber for Shift Adjusting Screw	2	
LF-37	522198001	Screw with Washer for Repeat Operating Lever	1		LF-71	516758001	Brake Unit (M4500, M4512)	1	
LF-38	500680001	Spring for Space Ratchet	1		LF-72	516761001	Spring for Brake Unit	1	
LF-39	501023001	Eccentric Screw for Space Ratchet	1						

CARRIAGE SIDE PLATE

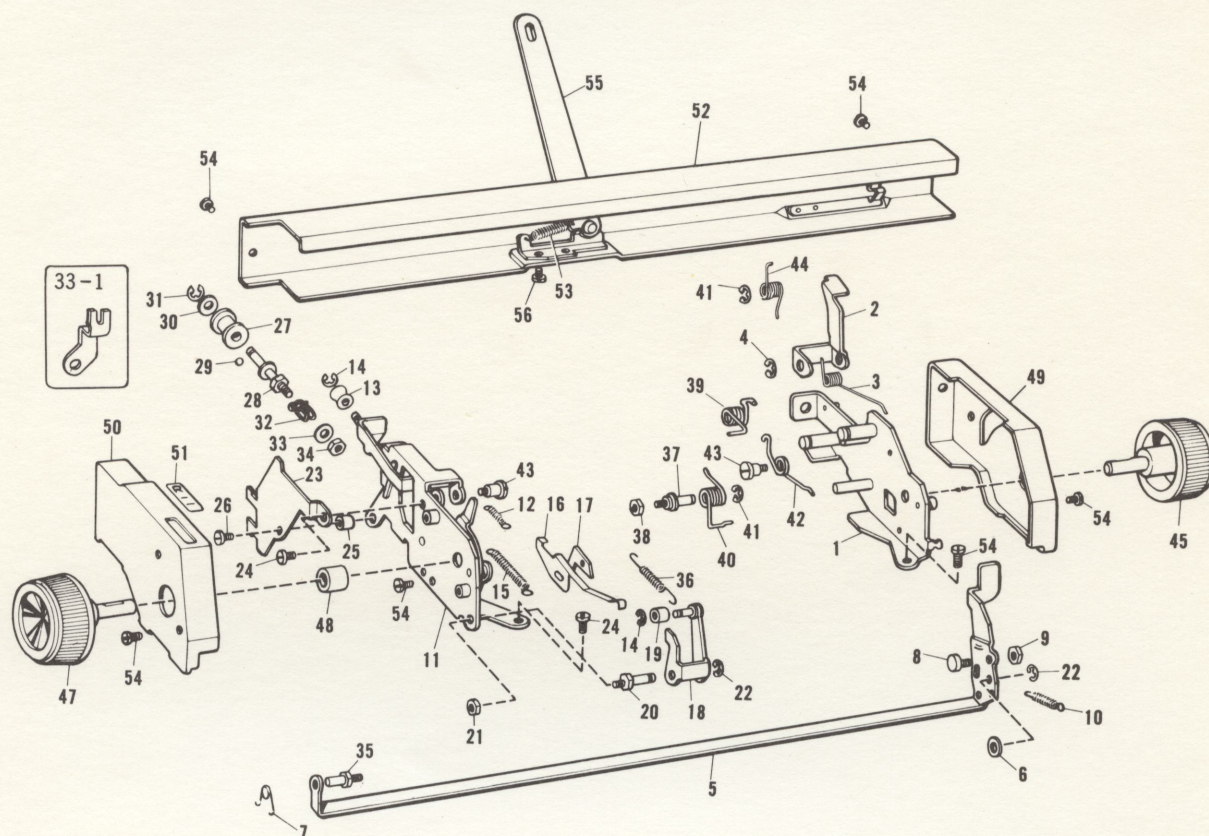


FIG. LG

KEY NO.	PART NO.	DESCRIPTION	Q'ty	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'ty	MEMO
LG- 1	516799001	Carriage Side Plate Unit (right) (M3512, M4512)	1		LG-30	516368001	Washer for Belt Guide Roller	2	
	516943001	Carriage Side Plate Unit (right) (M3500, M4500)	1		LG-31	048020346	Snap Ring for Steel Belt	1	
LG- 2	500504001	Paper Release Lever	1		LG-32	516435001	Belt Guide Wire	1	
LG- 3	500595001	Spring for Paper Release Lever	1		LG-33	402887001	Washer for Belt Guide Wire	1	
LG- 4	500357001	Snap Ring for Paper Release Lever	1		LG-33-1	517122000	Stopper for Margin Stop (left) (M3500, M4500)	1	
LG- 5	516624001	Carriage Release Lever Unit (M3500, M4500)	1		LG-34	500683001	Nut for Belt Guide Roller	1	
	516606001	Carriage Release Lever Unit (M3512, M4512)	1		LG-35	516578001	Stud for Carriage Release Lever	1	
LG- 6	205416001	Washer for Carriage Release Lever Unit	1		LG-36	513199001	Spring for Ratchet Roller Holder Unit	1	
LG- 7	516671001	Spring " (M3512, M4512)	1		LG-37	501133001	Stud for Paper Pan (M3512, M4512)	1	
LG- 8	516411001	Eccentric Screw for Carriage Release Lever Unit	1			500500001	Stud for Paper Pan (M3500, M4500)		
LG- 9	500683001	Nut for Eccentric Screw	1		LG-38	500295001	Nut for Paper Pan	1	
LG-10	550163001	Spring for Carriage Release Lever Unit (M3512, M4512)	1		LG-39	516711001	Spring for Paper Pan (right)	1	
	500463001	Spring for Carriage Release Lever Unit (M3500, M4500)	1		LG-40	500501001	Spring for Paper Pan (left)	1	
LG-11	516802001	Carriage Side Plate Unit (left) (M3512, M4512)	1		LG-41	500379001	Snap Ring	2	
LG-11	517123001	Carriage Side Plate Unit (left) (M3500, M4500)	1		LG-42	500516001	Spring for Paper Bail Scale	1	
LG-12	509383001	Spring for Line Space Ratchet	1		LG-43	500368001	Stud Screw for Paper Pan	2	
LG-13	516426001	Line Space Operating Lever Roller	1		LG-44	500511001	Spring for Paper Rest	1	
LG-14	048015346	Snap Ring	1		LG-45	507686006	Platen Knob (right)	1	
LG-15	516429001	Line Space Operating Lever Spring	1		LG-47	516440006	Platen Knob (left)	1	
LG-16	516430001	Spring for Line Space Selector	1		LG-48	516442001	Collar for Platen Knob	1	
LG-17	516431001	Washer for Line Space Selector	1		LG-49	516433	Carriage Cover (right)	1	
LG-18	512964001	Ratchet Roller Holder Unit (include Ratchet Roller)	1		LG-50	516458	Carriage Cover (left)	1	
LG-19	512966001	Ratchet Roller	1		LG-51	505479001	Line Space Indicator	1	
LG-20	508589001	Eccentric Stud for Ratchet Roller Holder	1		LG-52,53	516459	Paper Holder Complete (M3500, M4500)	1	
LG-21	402230001	Nut for Eccentric Stud	1			516533	Paper Holder Complete (M3512, M4512)		
LG-22	048025346	Snap Ring	2		LG-52	588202	Carriage Cover Unit (rear) (M3500, M4500)	1	
LG-23	516432001	Line Space Operating Lever Guide	1			516534	Carriage Cover Unit (rear) (M3512, M4512)		
LG-24	001660413	Screw	3		LG-53	501406001	Spring for Paper Support Arm	1	
LG-25	516434001	Collar for Screw	1		LG-54	402281002	Screw	9	
LG-26	403863001	Screw for Line Space Operating Lever Guide	1		LG-55	588203001	Paper Holder Unit	1	
LG-27	516401001	Belt Guide Roller	1		LG-56	002639303	Screw for Paper Holder Unit	2	
LG-28	516402001	Stud for Belt Guide Roller	1						
LG-29	402104001	Steel Belt for Belt Guide Roller	14						

CARRIAGE

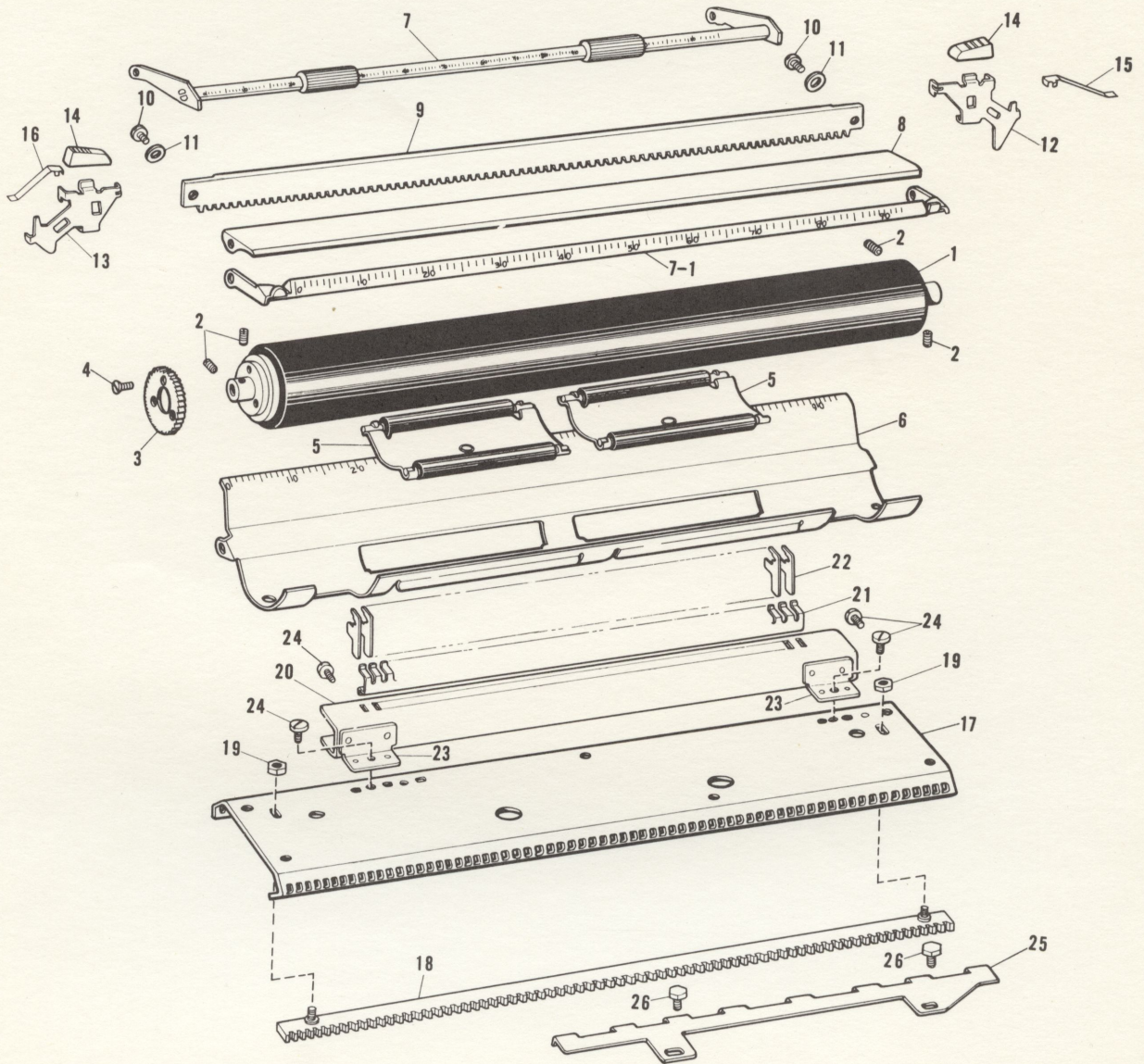


FIG. LH

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LH- 1	516437001	Platen (M3500, M4500)	1		LH-15	521912001	Spring for Margin Stop (right)	1	
	516529001	Platen (M3512, M4512)			LH-16	521915001	Spring for Margin Stop (left)	1	
LH- 2	522601001	Screw for Platen Knob	4		LH-17	516841001	Carriage (M3500)	1	
LH- 3	500497001	Line Space Ratchet Wheel	1			516844001	Carriage (M3512)		
LH- 4	512335001	Screw for Line Space Ratchet Wheel	3			516932001	Carriage (M4500)		
LH- 5	500592001	Paper Feed Roller Unit	2			516847001	Carriage (M4512)		
LH- 6	500499001	Paper Pan (M3500, M4500)	1		LH-18	516950001	Space Rack (M3500, M4500)	1	
	516527001	Paper Pan (M3512, M4512)	1			516905001	Space Rack (M3512, M4512)		
LH- 7	516804001	Paper Bail Scale (M3512, M4512)	1		LH-19	500683001	Nut for Space Rack	2	
LH- 7-1	500512001	Paper Bail Scale (M3500, M4500)	1		LH-20, 21, 22	516963001	Tab Frame Unit (M4500)		
LH- 8	522075	Paper Rest (M3500, M4500)	1			517045001	Tab Frame Unit (M4512)		
	516824	Paper Rest (M3512, M4512)			LH-20	516930001	Tab Frame (M4500)	1	
LH- 9	521916001	Margin Rack (M3500, M4500)	1			517046001	Tab Frame (M4512)		
	516812001	Margin Rack (M3512, M4512)			LH-21	516931001	Plate Spring (M4500)	1	
LH-10	001670603	Screw for Margin Rack	2			517047001	Plate Spring (M4512)		
LH-11	500341001	Washer for Margin Rack	2		LH-22	516764001	Tab Stop Pawl	108	
LH-12	521911001	Margin Stop (right) (M3500, M4500)	1		LH-23	516765001	Holder for Tab Frame	2	
	516809001	Margin Stop (right) (M3512, M4512)			LH-24	001660413	Screw for Tab Frame	4	
LH-13	516933001	Margin Stop (left) (M3500, M4500)	1		LH-25	521977001	Tab Stop Pawl (M3500)	1	
	516811001	Margin Stop (left) (M3512, M4512)				516532001	Tab Stop Pawl (M3512)	1	
LH-14	500542	Tip for Margin Stop	2		LH-26	507573001	Screw for Tab Stop Pawl (M3500, M3512)	2	

SHIFT

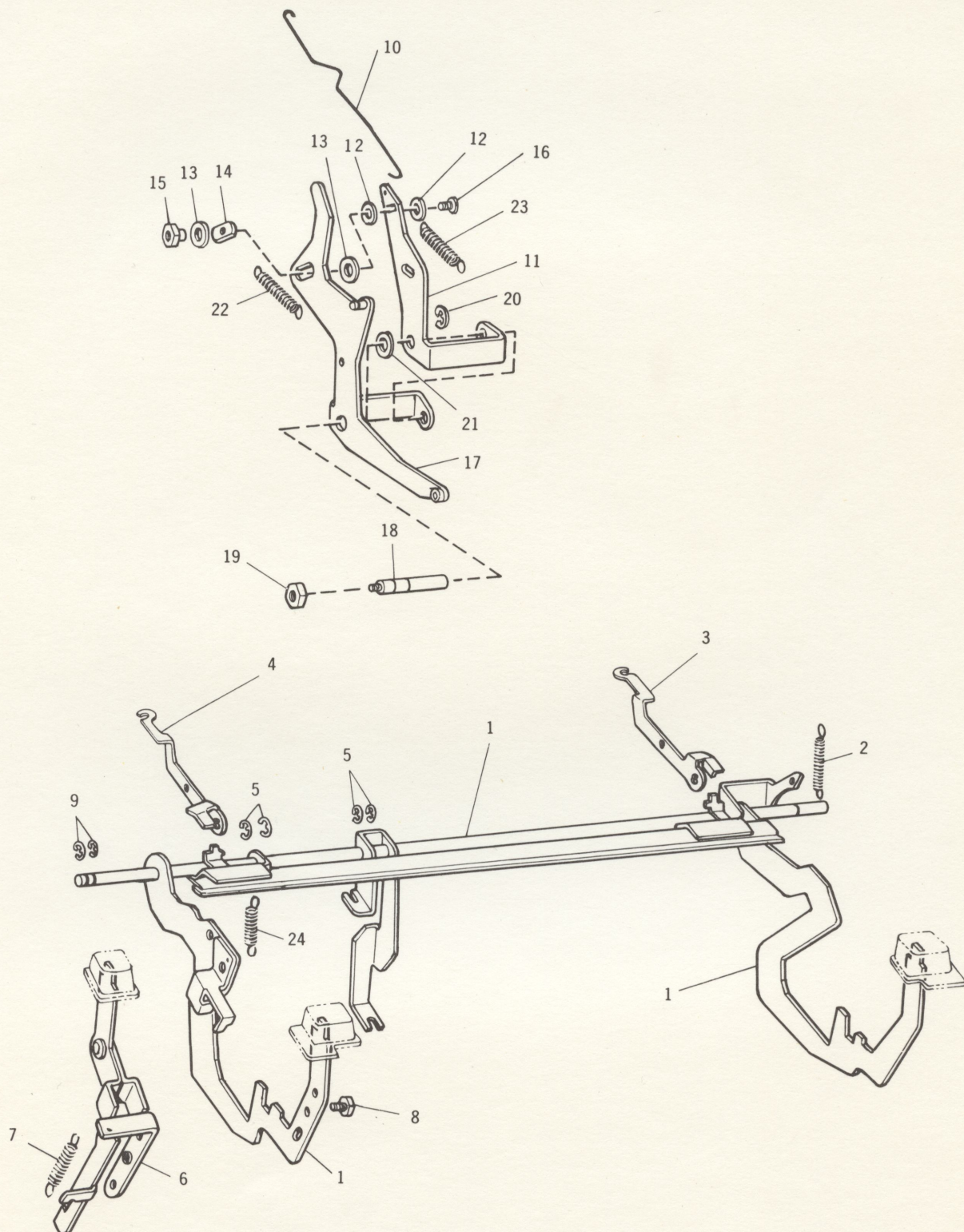


FIG. LI

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LI- 1	517004001	Shift Lever Unit	1		LI-14	510903001	Washer for Shift Operating Lever Unit	1	
LI- 2	512125001	Spring for Ribbon Operating Bar	1		LI-15	510779001	Nut for Shift Crank	1	
LI- 3	516954001	Ribbon Feed Pawl (right)	1		LI-16	017671412	Screw for Shift Crank	1	
LI- 4	516955001	Ribbon Feed Pawl (left)	1		LI-17	516561001	Shift Operating Lever Unit	1	
LI- 5	048040346	Snap Ring for Ribbon Operating Bar & Space Crank	4		LI-18	516951001	Stud for Shift Operating Lever Unit	1	
LI- 6	516706001	Shift Key Lock Lever Unit	1		LI-19	106129001	Nut for Shift Operating Lever Unit	1	
LI- 7	507303001	Spring for Shift Key Lock Lever Unit	1		LI-20	048050346	Snap Ring for Shift Crank	2	
LI- 8	516311001	Screw for Shift Key Lock Lever Unit	1		LI-21	516616001	Collar for Shift Crank	1	
LI- 9	048030346	Snap Ring for Shift Lever Unit	2		LI-22	516655001	Spring for Shift Operating Lever Unit	1	
LI-10	516297001	Shift Wire	1		LI-23	517044001	Spring for Shift Operating Lever Unit	1	
LI-11	516615001	Shift Crank	1		LI-24	511198001	Spring for Shift Lever Unit	1	
LI-12	511128001	Washer for Shift Crank	2						
LI-13	510904001	Washer for Shift Operating Lever Unit	2						

CARRIAGE RETURN

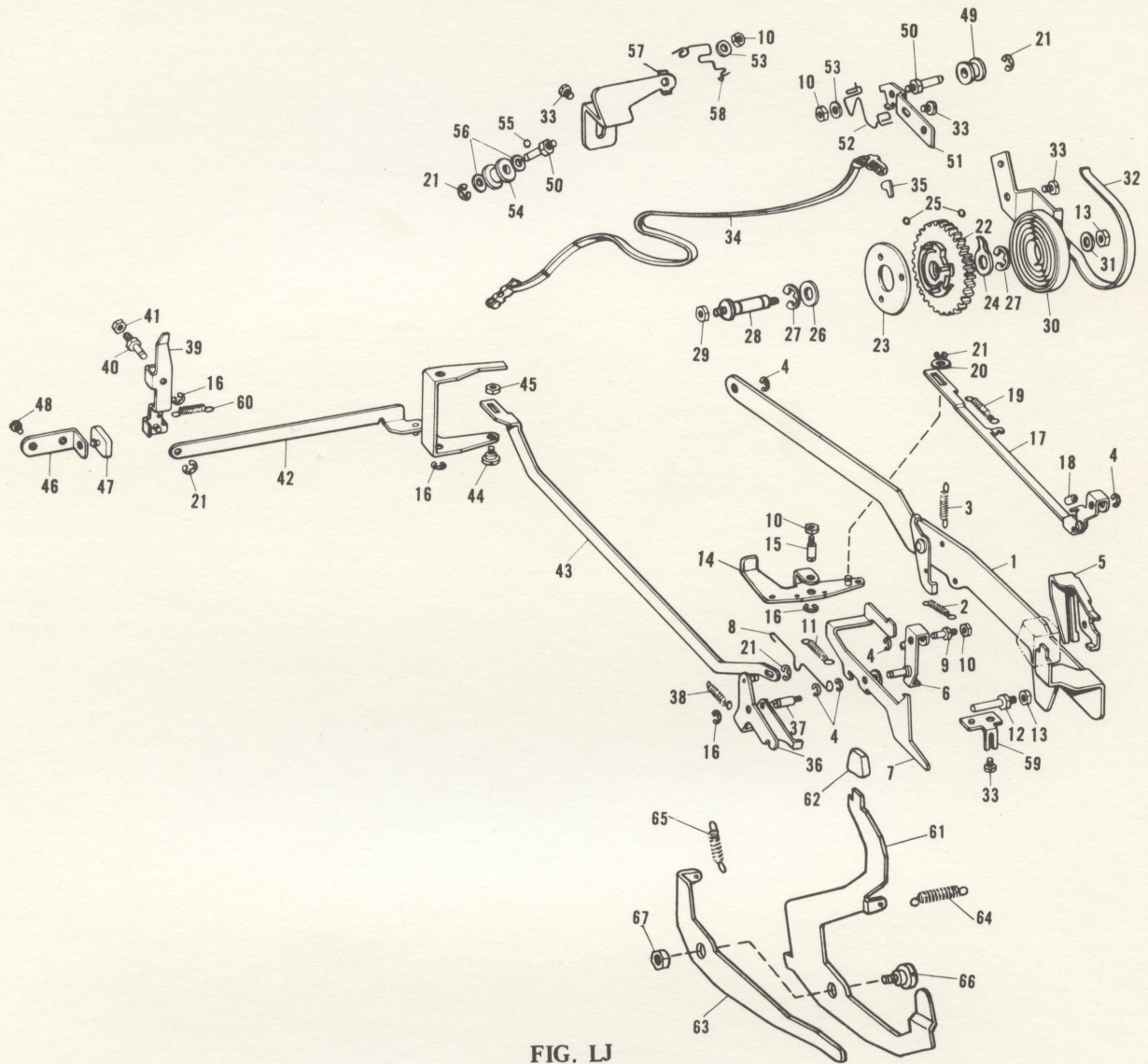


FIG. LJ

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LJ- 1	516344001	Return Key Lever Unit	1		LJ-35	516466001	Stop Rubber for Return Belt Unit	1	
LJ- 2	516272001	Spring for Return Key Lever Unit	1		LJ-36	517050001	Dog Shelf Lock Crank	1	
LJ- 3	503153001	Spring for Return Key Lever Unit	1		LJ-37	516357001	Stud for Dog Shelf Lock Crank	1	
LJ- 4	048025346	Snap Ring	5		LJ-38	500276001	Spring for Dog Shelf Lock Crank	1	
LJ- 5	516347000	Return Key Lever Guide	1		LJ-39	516746001	Return Release Link	1	
LJ- 6	516348001	Holder for Dog Shelf	1		LJ-40	516748001	Eccentric Stud for Return Release Link	1	
LJ- 7	516351001	Dog Shelf for Return	1		LJ-41	102853001	Nut for Return Release Link	1	
LJ- 8	516352001	Wire for Clutch Operating Crank	1		LJ-42	516380001	Return Release Link (center)	1	
LJ- 9	516353001	Stud for Holder	1		LJ-43	516383001	Return Release Connector	1	
LJ-10	402230001	Nut	4		LJ-44	516084001	Stud Screw for Return Release Connector	1	
LJ-11	500597001	Spring	1		LJ-45	500296001	Nut for Return Release Connector	1	
LJ-12	516354001	Eccentric Stud for Dog Shelf Stop	1		LJ-46	516384001	Return Release Crank Stop Plate	1	
LJ-13	021670403	Nut	2		LJ-47	510397001	Cushion Rubber for Return Release Crank Stop Plate	1	
LJ-14	516903001	Clutch Operating Plate	1		LJ-48	001679413	Screw for Return Release Crank Stop Plate	1	
LJ-15	516357001	Stud for Clutch Operating Crank	1		LJ-49	516926000	Belt Guide Roller A	1	
LJ-16	048030346	Snap Ring	4		LJ-50	516402001	Stud for Belt Guide Roller	2	
LJ-17	516358001	Clutch Operating Link Unit	1		LJ-51	516927001	Belt Guide Holder A	1	
LJ-18	500336002	Rubber for Clutch Operating Link Unit	1		LJ-52	516452001	Belt Guide Wire	1	
LJ-19	504669001	Spring for Clutch Operating Link Unit	1		LJ-53	503092001	Washer for Belt Wire	2	
LJ-20	550951001	Washer for Clutch Operating Link Unit	1		LJ-54	516401001	Belt Guide Roller B	1	
LJ-21	048020346	Snap Ring	5		LJ-55	402104001	Steel Ball for Belt Guide Roller	14	
LJ-22	517021000	Return Drum	1		LJ-56	516368001	Washer for Belt Guide Roller	2	
LJ-23	516366001	Return Drum Flange	1		LJ-57	516642001	Belt Guide Holder B	1	
LJ-24	517022001	Washer for Return Drum	1		LJ-58	516404001	Belt Guide Wire	1	
LJ-25	071031850	Steel Ball for Return Drum	18		LJ-59	516361001	Dog Shelf (Return) Guide	1	
LJ-26	516403001	Washer for Return Drum	1		LJ-60	517557001	Spring for Return Release Link	1	
LJ-27	048050346	Snap Ring for Return Drum	2		LJ-61	517048000	Return Release Lever	1	
LJ-28	517023001	Stud for Return Drum	1		LJ-62	503643004	Tip for Return Release Lever	1	
LJ-29	402959001	Nut for Return Drum	1		LJ-63	517049001	Lock Crank Release	1	
LJ-30	516608001	Return Drum Spring & Lid	1		LJ-64	503153001	Spring for Return Release Lever	1	
LJ-31	400806002	Washer for Return Drum Spring	1		LJ-65	507557001	Spring for Lock Crank Release	1	
LJ-32	516371000	Return Belt Cover	1		LJ-66	510035001	Stud Screw for Return Release Lever	1	
LJ-33	001660413	Screw	6		LJ-67	402230001	Nut for Return Release Lever	1	
LJ-34	512817001	Return Belt Unit	1						

CHASSIS

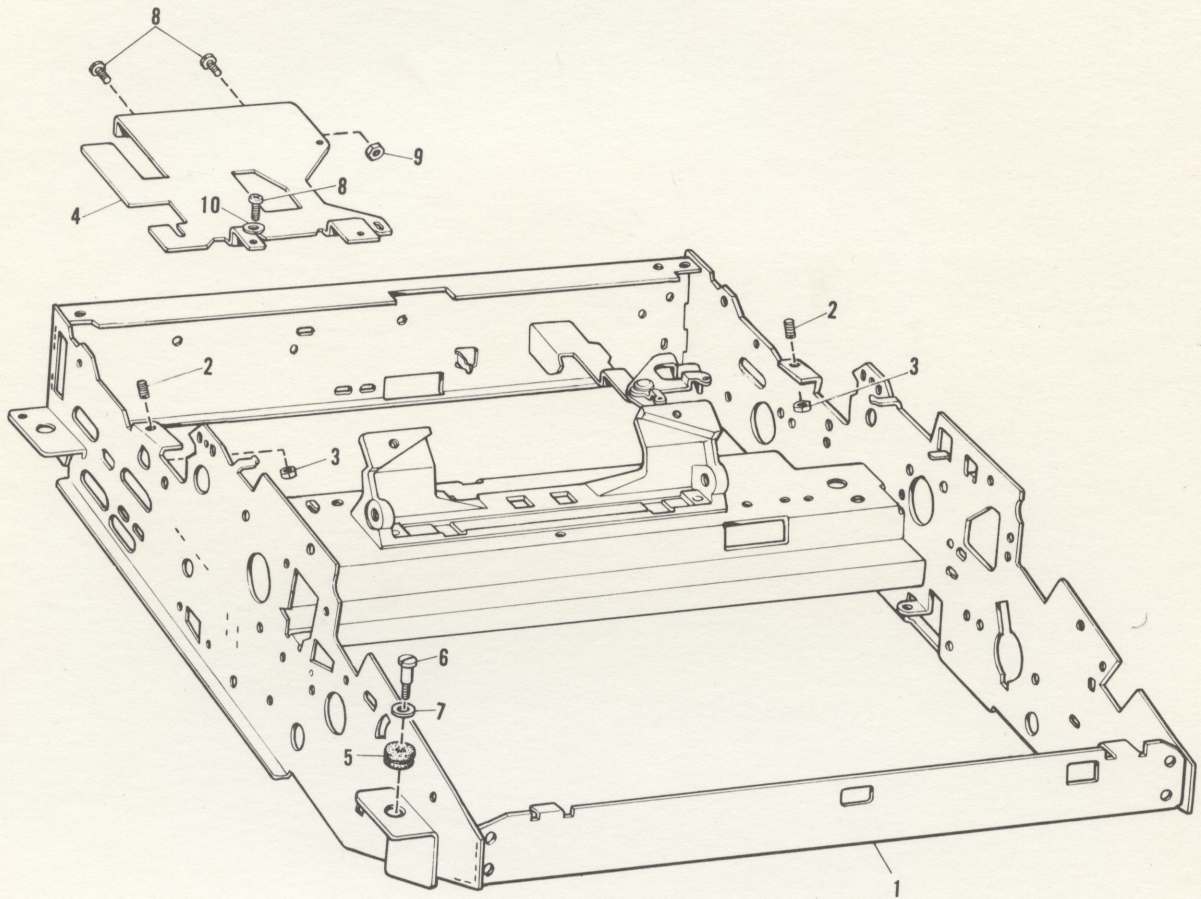


FIG. LK

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LK- 1	516915001	Chassis Unit	1		LK- 6	516296001	Screw for Chassis Unit	4	
LK- 2	516398001	Shift Adjusting Screw	2		LK- 7	510909001	Washer for Chassis Unit	4	
LK- 3	516399001	Nut for Shift Adjusting Screw	2		LK- 8	500654001	Screw for Motor Cover	4	
LK- 4	517076000	Motor Cover	1		LK- 9	500296001	Nut for Motor Cover	2	
LK- 5	511342001	Cushion Rubber	4		LK-10	503090001	Washer for Motor Cover	2	

COVER & CASE

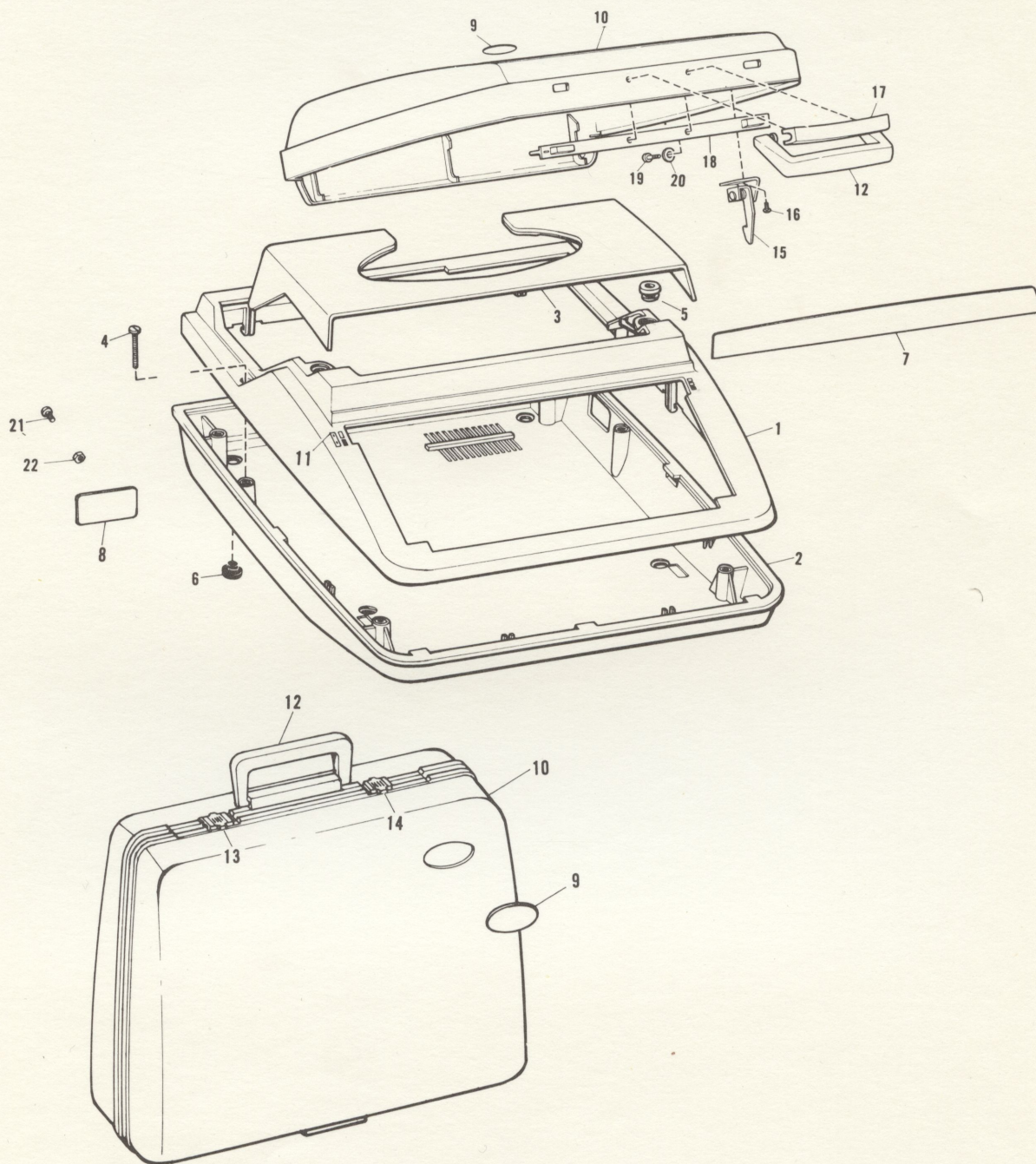


FIG. LL

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LL- 1	516610001	Upper Cover (M3512)	1		LL-10	516611001	Carrying Case Unit (M3512, M4512)	1	
	516830001	Upper Cover (M4512)				516544003	Lid Case Unit (M3500, M4500)		
	516853001	Upper Cover (M3500)			LL-11	516244001	Switch Indicator	1	
	516993001	Upper Cover (M4500)			LL-12	521503001	Handle for Carrying Case (M3512, M4512)	1	
LL- 2	516225	Lower Cover (UL, VDE)	1			507936005	Handle for Lid Case (M3500, M4500)		
	516725	Lower Cover (CSA)			LL-13	516613001	Latch (right) (M3512, M4512)	1	
LL- 3	516184	Top Cover	1		LL-14	516614001	Latch (left) (M3500, M4500)	1	
LL- 4	516202001	Screw for Upper Cover	2		LL-15	516191001	Lid Case Lock Unit (M3500, M4500)	2	
LL- 5	516245001	Top Cover Fitting Rubber	2		LL-16	401881003	Screw for Lid Case Lock Unit	4	
LL- 6	512141001	Rubber Foot	4		LL-17	520707	Handle Holder (M3500, M4500)	1	
LL- 7	516492001	Name Plate (M3500)	1		LL-18	516197	Lock Operating Plate (M3500, M4500)	1	
	516650001	Name Plate (M3512)			LL-19	512701001	Screw for Lock Operating Plate	2	
	517002001	Name Plate (M4500)			LL-20	503091001	Washer for Lock Operating Plate	2	
	517003001	Name Plate (M4512)			LL-21	009630813	Screw for Rating Plate (CSA)	2	
LL- 8		Rating Plate	1		LL-22	500296001	Nut for Rating Plate (CSA)	2	
LL- 9	516209001	Ornamental Plate	1						

ELECTRIC COMPONENTS & SNATCH ROLL

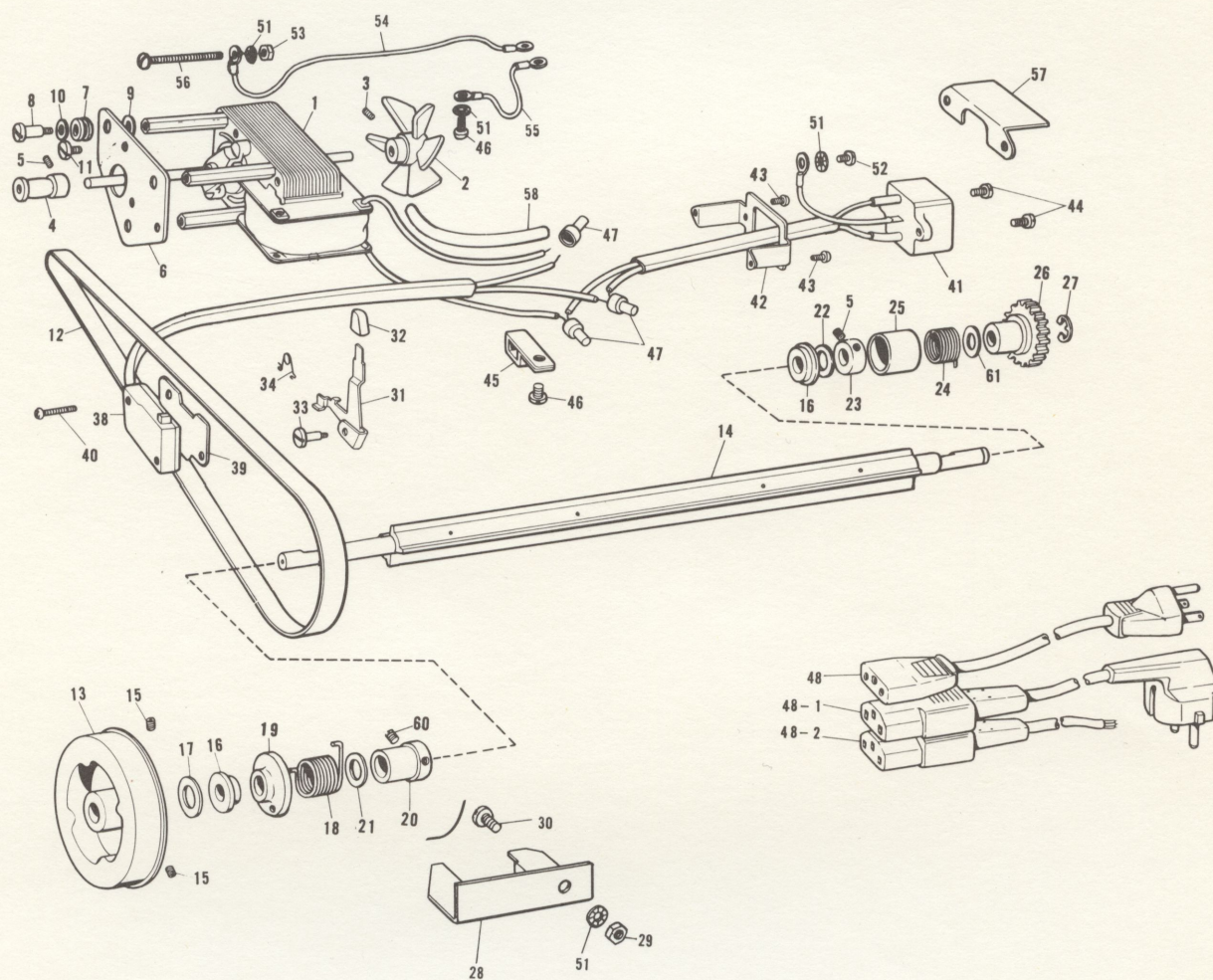


FIG. LM

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LM- 1	516472001	Motor (UL, CSA)	1		LM-30	001670603	Screw for Earthing Wire for CSA only	1	
	516491001	Motor (220V)			LM-31	516821001	Switch Lever	1	
	516645001	Motor (240V)			LM-32	503643006	Tip for Switch Lever	1	
LM- 2	516473001	Motor Fan	1		LM-33	509635001	Stud Screw for Switch Lever	1	
LM- 3	011660512	Screw for Motor Fan	1		LM-34	516822001	Snap Spring for Switch Lever	1	
LM- 4	516453001	Motor Pulley (60Hz)	1		LM-38	516483001	Power Switch with Lead Wire	1	
	516456001	Motor Pulley (50Hz)			LM-39	516827001	Insulating Paper for Power Switch	1	
LM- 5	014679320	Screw	3		LM-40	001261603	Screw for Power Switch	1	
LM- 6	516157001	Motor Holder	1		LM-41	516502001	Receptacle with Lead Wire (UL, CSA)	1	
LM- 7	511342001	Motor Cushion Rubber	3			516219001	Receptacle with Lead Wire (V.D.A.)		
LM- 8	516158001	Stud Screw for Motor	3		LM-42	516929000	Holder for Receptacle	1	
LM- 9	403332001	Washer for Motor	3		LM-43	001660413	Screw for Holder	2	
LM-10	402447001	Washer for Motor	3		LM-44	516298001	Screw for Receptacle	2	
LM-11	001679413	Screw for Motor Holder	3		LM-45	120679001	Wire Holder	1	
LM-12	516712000	Driving Belt	1		LM-46	400298002	Screw for Wire Holder	1	
LM-13	516988000	Power Roll Pulley.	1		LM-47	207216000	Wire Connector	3	
LM-14	516994001	Power Roll	1		LM-48	514325001	Power Supply Cord for UL	1	
LM-15	014680420	Screw for Power Roll Pulley	2			514323001	Power Supply Cord for CSA		
LM-16	516987001	Power Roll Metal	2		LM-48-1	514340001	Power Supply Cord for VDE		
LM-17	516999000	Washer for Power Roll Metal (left)	2		LM-48-2	514327001	Power Supply Cord for 220V - 240V		
LM-18	516567001	Shift Cam Spring	1		LM-51	502673001	Washer		
LM-19	516989001	Shift Cam	1		LM-52	105123002	Screw for Receptacle	1	
LM-20	516998001	Collar for Shift Cam Spring	1		LM-53	001660413	Nut	1	
LM-21	516547000	Washer for Shift Cam Spring	1		LM-54	516592001	Earthing Wire (A) for CSA	1	
LM-22	513200000	Washer for Power Roll Metal (right)	1			516218001	Earthing Wire (A) for 220V - 240V		
LM-23	513317001	Collar for Return Spring	1		LM-55	516249001	Earthing Wire (B) for 220V - 240V	1	
LM-24	513318001	Return Spring	1		LM-56	516498001	Screw for Earthing Wire	1	
LM-25	513319001	Return Collar	1		LM-57	516928000	Insulating Paper for Earthing Wire	1	
LM-26	516717001	Return Gear	1		LM-58	516591001	Insulating Tube for Motor Lead Wire (CSA)	1	
LM-27	048040346	Snap Ring for Return Gear	1		LM-60	014679320	Screw for Shift Cam Spring	2	
LM-28	516497001	Motor Cover for CSA only	1		LM-61	517040000	Washer for Return Gear	1	
LM-29	106129001	Nut for Motor Cover	1						

TABULATOR SET-CLEAR MECHANISM

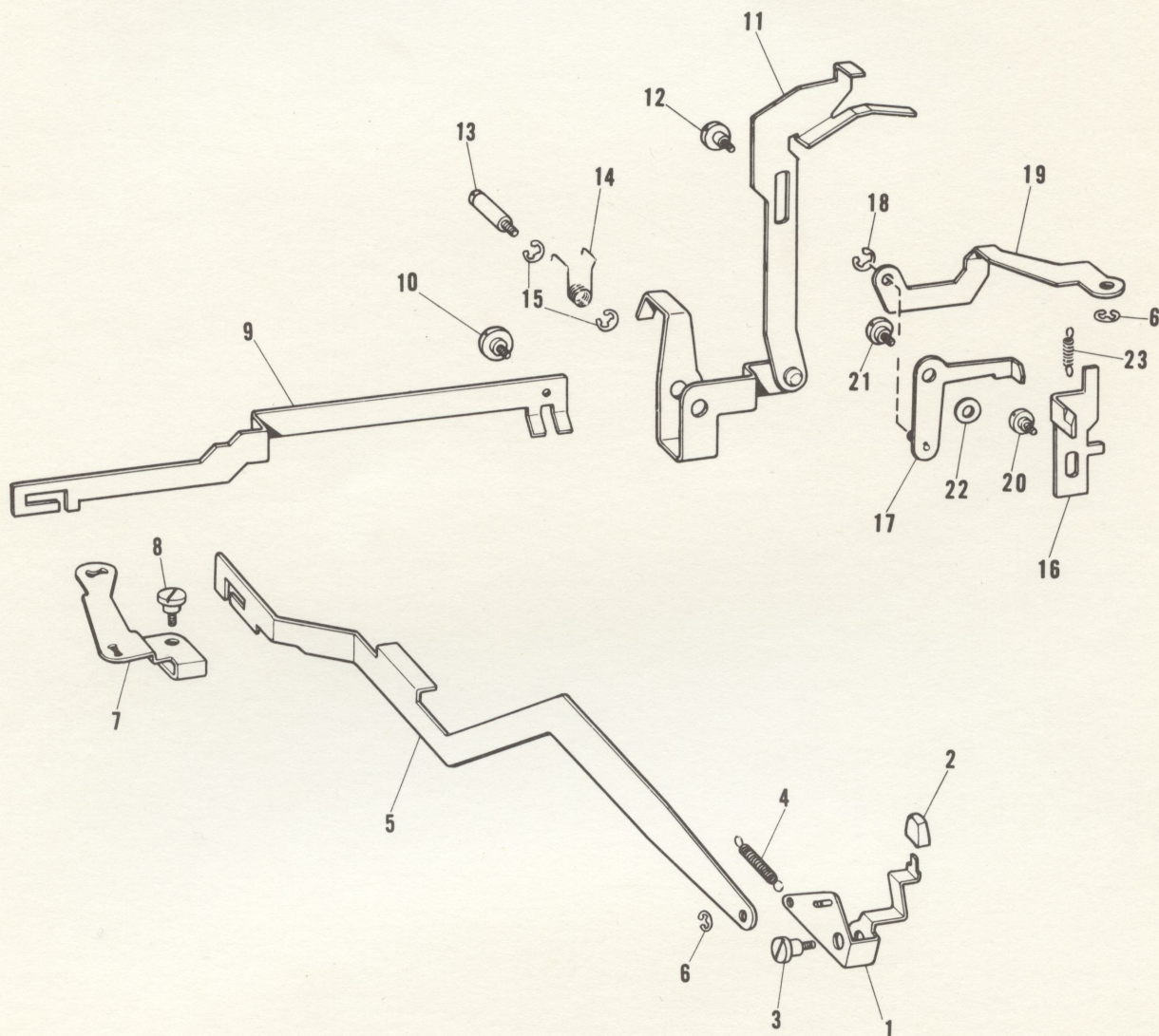


FIG. LN

KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LN- 1	516767001	Tab Set-Clear Lever	1		LN-13	516791001	Stud for Tab Set-Clear Pawl Unit	1	
LN- 2	503643006	Tip for Tab Set-Clear Lever	1		LN-14	516790001	Spring for Tab Set-Clear Pawl Unit	1	
LN- 3	516769001	Stud Screw for Tab Set-Clear Lever	1		LN-15	048030346	Snap Ring for Tab Set-Clear Pawl Unit	2	
LN- 4	503154001	Spring for Tab Set-Clear Lever	1		LN-16	516792001	Tab Stopper	1	
LN- 5	517043000	Tab Set-Clear Connector (front)	1		LN-17	516794001	Tab Crank	1	
LN- 6	048020346	Snap Ring for Connector	2		LN-18	048015346	Snap Ring for Tab Connector	1	
LN- 7	516771000	Tab Set-Clear Crank (front)	1		LN-19	516796000	Tab Connector	1	
LN- 8	509013001	Stud Screw for Tab Set-Clear Crank	1		LN-20	511033001	Stud Screw for Tab Stopper	1	
LN- 9	516772000	Tab Set-Clear Connector (rear)	1		LN-21	505951001	Stud Screw for Tab Crank	1	
LN-10	507590001	Stud Screw for Tab Set-Clear Connector	1		LN-22	516797001	Washer for Tab Crank	1	
LN-11	516786001	Tab Set-Clear Pawl Unit	1		LN-23	516798001	Spring for Tab Stopper	1	
LN-12	511260001	Stud Screw for Tab Set-Clear Pawl Unit	1						

PACKING MATERIAL

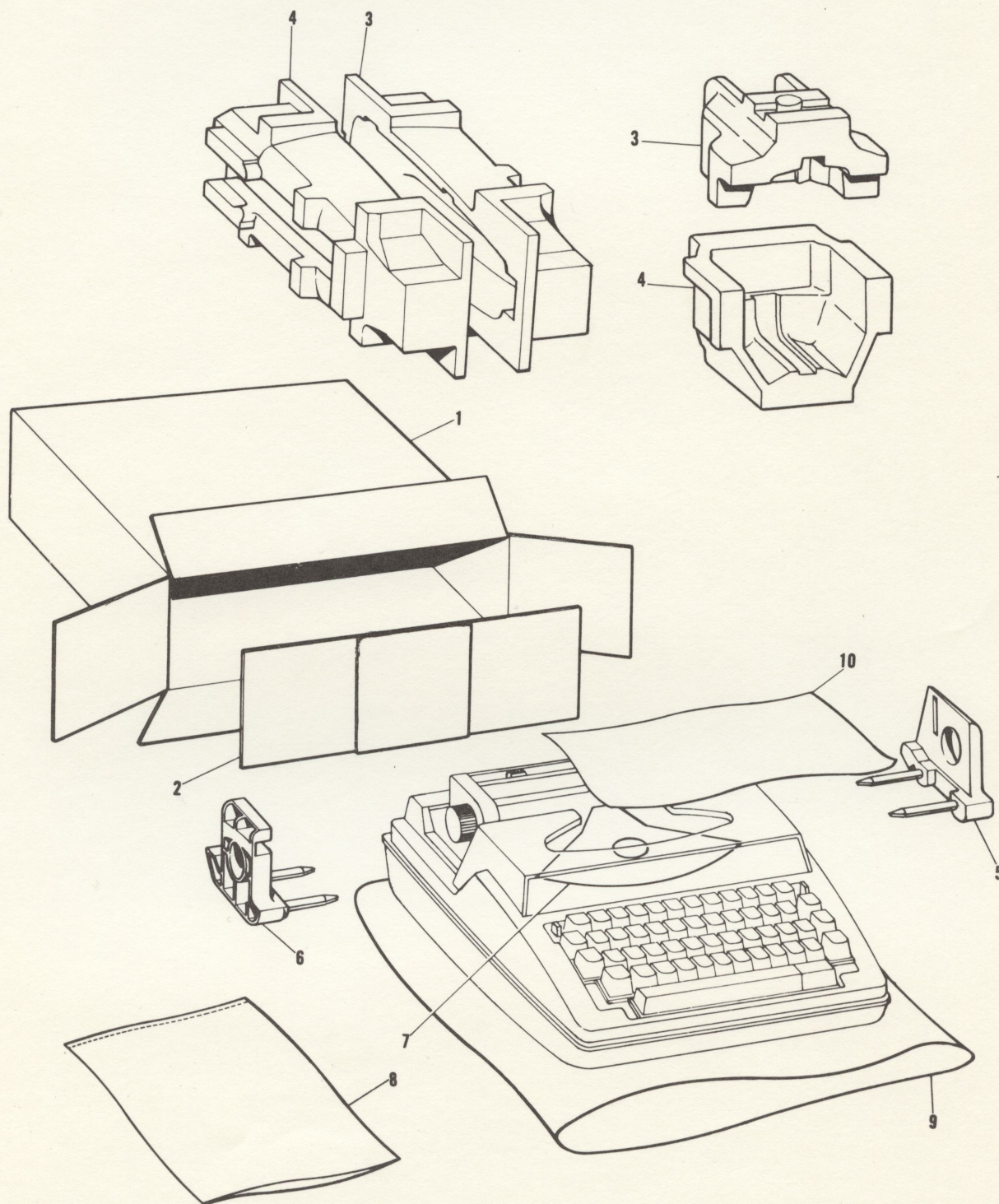


FIG. LO

KEY NO.	PART NO.	DESCRIPTION	Q'ty	MEMO	KEY NO.	PART NO.	DESCRIPTION	Q'TY	MEMO
LO- 1	560689	Carton (M3512, M4512)	1		LO- 5	560613	Pad for Carriage Release (right)	1	
	560686	Carton (M3500, M4500)			LO- 6	560614	Pad for Carriage Release (left)	1	
LO- 2	560001040	Pad for Carton (M3512, M4512)	2		LO- 7	560515000	Type Bar Lock Plate	1	
	560002088	Pad for Carton (M3500, M4500)	2		LO- 8	560464000	Polyvinyl Bag for Instruction Book & Cord	2	
LO- 3	560692001	Styrofoam (upper) for Case (M3512, M4512)			LO- 9	560197000	Polyvinyl Bag for Case	1	
LO- 3-1	560663000	Styrofoam (right) for Case (M3500, M4500)	1		LO-10	560335000	Paper for Vapor Phase Inhibitor	1	
LO- 4	560692002	Styrofoam (lower) for Case (M3512, M4512)	1						
LO- 4-1	560664000	Styrofoam (left) for Case (M3500, M4500)	1						

